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**From:** EPAResearchCompass [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C1E8F11508674C3C954553A1129D33E5-EPARESEARCH]  
**Sent:** 11/6/2018 5:12:37 PM  
**To:** ORD-ALL Feds and NonFeds and RSLs [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2c735272eef941588aefd9a05ed28823-ORD-ALL Feds and NonFeds and RSLs]  
**CC:** Lincoln, Larry [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8248d03a1441414db7754db201ebec45-Lincoln, Larry]; Barnett, Felicia [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5773b45cae5142fe950861dd6146f1e9-Barnett, Felicia]; Carter, Bobbi [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f16dcafe85fc418ebd1651be2e8ab82d-Carter, Bobbi]; Gettle, Jeaneanne [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d8e72aa7e1894faea44006fd9f22b637-Gettle, Jeaneanne]; Taylor, Dawn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b984d00ec06544e498ee5d986f97047c-Taylor, Dawn]; Klinger, Adam [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=346d5466632f4967adc7169c8d2ce4fd-Klinger, Adam]; Liljegren, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c7098a838cd34f75b8878571fe95d939-JLiljegr]; Pollard, Solomon [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=16cdf700f8024145847a2770b84abae3-Pollard, Solomon]; Clarage, Meredith [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ee9504437be545489f518710a5e80e68-Clarage, Meredith]; Fan, Shirley [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cdeba1df9599435cb7401d0a65be7cda-Sfan02]; Peffers, Mel [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=1b6116fbb41448b38b3caefc882165fe-Peffers, Melissa]  
**Subject:** Weekly Compass: November 6, 2018



Weekly Update: 11/6/2018

Welcome to the Weekly Compass, your gateway to information about recent and upcoming ORD activities. If you have ideas for the Weekly Compass, please send them to the editors. To see past issues, visit the Weekly Compass archive on [ORD@work](mailto:ORD@work).

## Weekly Note from Jennifer

ORDers- Tomorrow, Chris Robbins, Lisa Matthews, and I will meet with David Paylor, Environmental Research Institute of the States (ERIS) Board President and VA DEQ Director, as well as Carolyn Hanson, Acting ECOS Executive Director, to plan our FY19 state partnership work. We will discuss ORD's support for two of the ECOS Cooperative Federalism 2.0 priority areas--developing a common framework for responding to emerging contaminants and informing EPA research priorities to address state needs. We will seek input from ECOS/ERIS on the goals and key actions proposed for our FY19 ECOS/ERIS work plan.

This week, Vaughn Noga, the Agency CIO, and a team from his office will be visiting RTP. In recent discussions with ORD, Vaughn emphasized his goal to increase OEI-ORD collaboration. Vaughn will start his visit tomorrow with discussions with OSIM and OARS staff on processes, ORD strategies, and recent developments. On Thursday, Vaughn and his team will take tours of the RTP facility and participate in discussions, presentations, and lightning rounds with ORD research staff on several topics such as HERO, Enviro Atlas, SmokeSense, and the CSS dashboard. An open mic for all ORD in RTP is also scheduled for 3 p.m. (EST) on Thursday.

A huge thank you to everyone in ORD who helped us meet our goal for Feds Feed Families. As you recall, ORD was the EPA lead for this effort for this year, and as noted in last week's mass mailer, EPA staff 253,450 pounds of food, surpassing our goal by almost 80,000 pounds of food! Thanks to each and every one of you who participated in helping to put food on the table for so many.

This year's Combined Federal Campaign is underway! This week, ORD won the weekly competition, which was for the highest amount of dollars pledged. Thank you for your continued support to CFC.

As Veterans Day approaches, we should all take a moment to thank the over 80 veterans in ORD for their service to our country. I hope you all have a restful long weekend. *-Jennifer*

## Quick Updates

- Read the Air & Energy Fall Research News
- November 12 – December 10: Federal Benefits Open Season (Health, Dental/Vision, Flexible Spending). The Virtual Benefits Fair is open during open season.
- November 16: FY18 PARS ratings; signed, original FY18 PARS Plans; and LCO PARS certifications of completion due to OARS/HRD
- November 24: Deadline for scheduling "use or lose" leave for restoration eligibility and obtaining supervisor approval
- The 2019 16th Annual P3 Awards: A National Student Design Competition Focusing on People, Prosperity and the Planet Phase 1 Request for Applications (RFA) is open until December 11
- December 14: Response to "Request for Final 2018 Conference Spending Data" due to OCFO
- December 31: Mandatory manager/supervisor training must be completed
- Recognize the accomplishments of your colleagues by nominating them for the Arthur S. Flemming Awards! If you are interested in nominating an EPA employee, please email one to two paragraphs justifying the award nomination to Marian P. Cooper in the Office of Administration and Resource Management no later than Monday, Jan. 7

- In recognition of your colleagues' exceptional work, have you considered nominating them for a Service to America Medal aka the Sammies? Anyone can nominate a federal employee for a Sammie, so please consider nominating an EPA colleague by January 18.
- Don't forget to check out the open opportunities on Talent Hub!
- You can read the This Week @ EPA newsletter [here](#).
- Upcoming webinars:
  - EPA-wide IRIS Meeting: Wednesday, November 7, 2-3 ET
  - SHC Seminar Series: State of Michigan: Environmental Restoration, Ecosystem Service Valuation, and Community Revitalization: Wednesday, November 7, 3:30-4:30 ET
  - Informational Webinar: How to Apply for an EPA P3 Grant: Thursday, November 8, 2-3 ET
  - Virtual Benefits Health Fair Live Chat: Tuesday, November 13, 10 - 5 ET
  - TSP Loans & In-Service Withdrawals: Wednesday, November 14, 10 -11:30 or 1-2:30 ET (registration password: TSPweb)
  - EPA Tools and Resources Webinar: Remediation to Restoration to Revitalization-- Tools to Support Remedy Decisions: Wednesday, November 14, 3-4 ET
  - TSP Post-Service Withdrawals: Thursday, November 15, 10-11:30 ET or Thursday, November 15, 1-2:30 ET (registration password: TSPweb)
  - SERDP & ESTCP Webinar: Stormwater Impacts on Sediment Recontamination: Thursday, November 15, 12-1:30 ET

## Photos of the Week: ORDers in Costume

### In the Lab:

#### PFAS Chemical Testing

Developing information to inform Agency and state decisions concerning perfluorinated chemicals in the environment is a major priority for ORD. ORD is developing toxicity and toxicokinetic information for an initial list of 75 PFAS chemicals selected to represent a majority of categories for PFAS chemicals based upon structure. ORD will soon commence analysis of a second set of 75 PFAS chemicals and recently reached out to Agency Program offices, Regional Offices, and the states asking for chemical nominations to be included in that second set. We received nominations from multiple Program and Regional Offices, as well as 11 states. A total of 108 unique nominations were received. Of those, there are 30 potential PFAS chemicals that might be included in the second list of 75. Fifteen were identified by more than one program office, regional office or state. ORD will be finalizing the second set of PFAS chemicals shortly.

#### Provided Washington State with Technical Assistance Related to Lead Sampling in Schools

Last week, at the request of OW, NRMRL's Darren Lytle and Mike Schock talked with representatives from the Washington State Department of Health about sampling for lead in schools. Based on information provided in the EPA 3Ts Toolkit, a school building located the State of Washington replaced faucets and fixtures after observing high lead levels in water

samples. Following replacement of the faucets, they resampled and continued to see elevated lead levels in the water. Darren and Mike answered technical questions from the health department regarding how and where to sample and other related technical issues.

### **Embassy Science Fellow Working on Air Pollution in Warsaw, Poland**

As part of the Embassy Science Fellows Program, NRMRL's Richard Baldauf has been working with the U.S. Department of State in Warsaw, Poland since mid-September. The primary focus of his work to share U.S. experience with air pollution mitigation from transportation and other local sources, and the use of urban design and green infrastructure to improve air quality exposures for urban residents. Richard has been able to learn about innovative air pollution control methods being implemented in Poland, including the promotion of e-mobility and replacement of old, coal-fired residential boilers. His fellowship will last through mid-December.

### **Field Studies at Reynolds Metals Company Superfund Site, Troutdale, OR**

Last week, NRMRL's Robert Ford, Steve Acree, and Randall Ross provided a technical briefing on observations of site hydrology from the ORD study at the Reynolds Metals Company Superfund Site. This research builds on the relationship initiated through the ROCS-Net Program and will provide Region 10, the Oregon Department of Environmental Quality, Port of Portland, and other partners with tools to evaluate where groundwater may be daylighting into surface waters near the site. The Reynolds Metals Company Superfund Site is the former location of the Reynolds/Alcoa aluminum smelter, which operated an aluminum reduction plant that generated metals-bearing wastes that contaminated soil, groundwater, surface water and sediment.

### **Presentation on Decision Models for Coral Reef Resilience**

Last week, John Carriger (NRMRL) and William Fisher (NHEERL) spoke at a meeting of the National Academy of Sciences (NAS) Committee on Interventions to Increase the Resilience of Coral Reefs, held at NAS headquarters. Their presentation, "Application of Coral Reef Decision Models in Guánica Bay, Puerto Rico," discussed the success of strategic stakeholder engagement, a structured decision approach, and decision support tools that contributed to a comprehensive watershed management plan. The NAS committee, an international panel of coral reef scientists, is exploring the advantages and limitations of decision tools to evaluate risks and benefits of implementing novel approaches to improve coral resilience.

### **Field Work for Green Infrastructure Project, Fort Irwin, CA**

November 3-14, NRMRL's Russell Neill and Justin Groves will assist Steve Kraemer (NERL) with sonic drilling, core collection, and installation of a monitoring well, multilevel suction lysimeters, and various soil sensors in the vadose zone. A second, angled installation of well piezometers/lysimeters will be constructed below the bottom of the new drywell system. This project is collecting data to model a soon-to-be rehabilitated drywell system and a newly constructed drywell system with sediment chamber as a best management practice for stormwater management and aquifer recharge in an arid environment.

### **Preventing Overflow in Water Storage Tanks**

NRMRL's Jonathan Burkhardt, NHRSC's James Goodrich, Jeff Szabo, John Hall and Region 8 coauthors, published "Understanding the Impact of Mesh on Tank Overflow System Capacity," in the *Journal of the American Water Works Association*. The purpose of this study was to determine if mesh would help to prevent overflow capacity in water storage tanks. The results of this study will help water utilities ensure that overflow systems with mesh are appropriately sized.

## **Field Testing for Oil Burns on Water, Hanover, NH**

This week, NRMRL's Brian Gullett will participate in the second half of a field testing effort at the U.S. Army Corps of Engineers (USACE) Cold Regions Research Engineering Laboratory (CRREL). EPA scientists will sample emissions from oil burns on water as researchers from USACE and the Bureau of Safety and Environmental Enforcement (BSEE) test various configurations of oil booms. This effort is working to improve the combustion efficiency of oil and adapt the technology for any future oil spills.

## **Publication on Background Soil PFAS Loads**

*Science of the Total Environment* recently published Determining global background soil PFAS loads and the fluorotelomer-based polymer degradation rates that can account for these loads by John Washington (NERL), Mike Cyterski (NERL), and others. Fluorotelomer-based polymers (FTPs) are manufactured chemicals used in a wide array of industrial and commercial applications such as food packaging, carpeting, upholstery and textiles. There has been some debate among scientists about how quickly FTPs break down and degrade. Early studies indicated that these substances' half-lives are over 1,000 years, while others suggest their half-lives are on the order of decades. This is an important question because FTPs can break down into more toxic per- and polyfluorinated alkylated substances (PFAS). In this article, the authors looked at data from one of their earlier papers to estimate the global background concentrations and loads of PFAS in soils. The estimates demonstrate that the Earth's surface soils are a major reservoir of PFAS. These results support the assertion that FTPs have half-lives on the decade scale, consistent with what the authors reported in earlier papers based on lab experiments, rather than the millennial scale contended by others.

## **Region 5 Request for Candidate Communities for Pb Effort**

Region 5 requested ORD's assistance with identifying potential lead (Pb) focus communities in Ohio based on available data. This is part of EPA's Environmental Justice and Community Revitalization Council's (EJCRC's) focus on advancing the use of community-driven solutions across the Agency to achieve tangible results in communities. NERL's Valerie Zartarian, Mike Tornero, Jim Xue and Jay Garland worked to develop a set of candidate communities quickly. They used the Environmental Justice Screening and Mapping Tool, EJSCREEN, including an EJSCREEN index, blood lead level data, and previously modeled data. They will continue to assist Region 5 in this effort as needed.

## **EnviroAtlas Featured in NSTA Reports**

EnviroAtlas was included in the September 2018 National Science Teachers Association (NSTA) Newsletter, *NSTA Reports*, which is circulated to approximately 50,000 members. The issue addresses EnviroAtlas as a resource for K-16 educators by giving them access to map-based environmental data and teaching them how to work with the information. The article gives examples of helpful educational aspects of EnviroAtlas such as a video that introduces users to EnviroAtlas and its capabilities, materials that provide specific guidance on working with the site's interactive maps, and interactive learning modules for using EnviroAtlas data in the classroom.

## **NERL Scientist Invited to Fudan University, Shanghai, China**

NERL's Golam Sarwar was invited to Fudan University in Shanghai, China, this week to discuss dimethyl sulfide (DMS) measurements and modeling. Researchers at Fudan University are collaborating with NERL to update the Community Multiscale Air Quality (CMAQ) model to include DMS emissions and chemistry. DMS is emitted from oceans into the atmosphere and it can react with sulfur dioxide which can later form aerosol sulfate. Researchers at Fudan University have recently collected a unique dataset measuring DMS over the East China Sea, which could be valuable toward examining the impacts of DMS on air quality and human health.

## **Meeting with NYDEC to Discuss Acid Monitoring Project**

Yesterday, NERL's Donna Schwede and NRMRL's John Walker met with New York State Department of Environmental Conservation (NYDEC), EPA Clean Air Markets Division, and others to discuss the results of the NorthEast Comprehensive Acid Monitoring Project (NE-CAMPR). In the project, NYDEC augmented sulfur and nitrogen measurements in the Adirondack Mountain Region to support a critical loads-based approach to air quality management.

## **Continuing US-UK Collaboration Agreement on Air Pollution Exposure Science**

On November 12 and 13, NERL's Rohit Mathur, Shawn Roselle, David Heist, and Deborah Luecken will participate in the 11th Meeting of the US-UK Collaboration Agreement on Air Pollution Exposure Science in Stafford, UK. On November 14, the scientists will participate in the Environment Agency Air Quality Conference in Birmingham, UK. Since 2008, annual workshops have been conducted alternately in the US and UK to foster collaboration. This collaboration elevates and promotes the most recent and scientifically credible knowledge to predict future air quality and to assess, develop and implement environmental regulations and decisions in both countries. In particular, applications of the Community Multiscale Air Quality (CMAQ) model will be discussed at this meeting for regulatory and research applications in the UK, as well as future opportunities on air quality and exposure modeling.

## **SBIR Company Showcasing Prototype on National Mall**

EPA SBIR Phase II company, ASAT, Inc. will be showcasing their Integrated Stove prototype at the Green Heat/DOE stove competition on the National Mall, November 9-13. Their presentation poster highlights features of the Integrated Stove that can be used to heat, cook and generate electricity.

## **Grantee Publication on Assessments for Review of Potential Carcinogens**

Systematic review, transparency, and public access to the information on which the decisions on hazards and risks of environmental chemicals are made is critical. In a just-released paper by Shapiro et al. "Software Tools to Facilitate Systematic Review Used for Cancer Hazard Identification", key features of online tools resulting from support by EPA STAR grant RD83516602 are described. The Software tools developed are the Health Assessment Workplace Collaborative (HAWC) (for literature searches) and Table Builder (for data tabulation and analysis) to address the needs for more timely assessments for the review of potential carcinogens. HAWC is a public, online, collaborative workspace that was designed to facilitate all aspects of environmental human health assessments. Table Builder is a web-based content management system designed to capture extracted data from the published literature and facilitate qualitative and quantitative analyses (e.g., meta-analyses, statistical testing) for human health assessments of potential carcinogens.

## **Grantee Publication on Triclocarban in Pregnant Women in Puerto Rico**

A recent publication in *Environment International*, presented STAR research results indicating levels of triclocarban in pregnant women in northern Puerto Rico were far higher than in the general United States population. The work was conducted by the CRECE Center, one of the joint EPA/NIEHS Children's Research Centers. Triclocarban is an antibacterial agent used in soaps and other personal care products. In 2016, the Food and Drug Administration banned its use in soaps by late 2017, largely due to health concerns related to its endocrine disrupting properties. Triclocarban was detected in 93% of the urine samples from 1,003 pregnant women in Northern

Puerto Rico, with a median concentration 37 times higher than the median concentration in women of reproductive age in the general U.S. population. Results indicate elevated triclocarban levels were associated with use of soaps containing triclocarban. This research contributes to understanding important sources and pathways of exposure to common chemicals known or suspected to impact human health.

### **Edison Outdoor Biological Release Field Study**

Earlier this year, researchers from NHSRC and OLEM initiated a field study aimed at understanding the outdoor fate and transport of spores and testing innovative sampling methods. Parking lots at NRMRL's Urban Watershed Testing facility in Edison, New Jersey were inoculated with *B. atrophaeus*, a non-pathogenic surrogate spore of anthrax. The study tested both the collection and detection efficiency of traditional and novel composite sampling techniques while monitoring spore wash off by rainfall events over an extended period of time. Last month, NHSRC completed the final sampling event and reinoculated portions of the parking lot for continued testing of automated stormwater sensors and measurement of spore wash off. The project will run for another 6 rain events after which results will be compiled and shared with emergency responders and other partners.

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### **In the Office:**

#### **Scientific Integrity Office Open Hours**

EPA's Scientific Integrity Official, Dr. Francesca Grifo, is now holding regular, open office hours on scientific integrity. Every Wednesday, from 11:30 am to 1:30 pm Eastern Time, she will be available for walk in (or call in) consultations in her office in Washington, D.C., in the Ronald Reagan Building, room 41141. Francesca's telephone number is 202-564-1687. She encourages all to stop by or call to talk about questions or concerns regarding scientific integrity at the Agency. If she is out of town, either Dr. Vince Cogliano or Martha Otto will be in Francesca's office and available to talk.

#### **Agency Mandatory Cybersecurity Stand-Down Today at 2 ET**

There will only be one in-person session for this training that all employees must take. If you cannot participate in this session, alternative training instructions will be provided on November 7. The training will be held today from 2-3pm ET. This training is mandatory and attendance will be taken. All phone participants are encouraged to call in 30 minutes prior to allow time to provide their full name. To ensure your participation is accounted for, please record your full name in one of the following ways:

- Providing the operator with your first and last name when calling into the teleconference
- In-person sites will have signup sheets for participants

If you have any questions, please contact Glenda Noel at 919-541-2656.

#### **2018 Veterans Day Commemoration**

In the spirit of honoring EPA veterans and others who have served their country, you are invited to attend the EPA's 2018 Veterans Day Commemoration on Wednesday, Nov. 7 from 11 -12 noon ET in HQ in the Green Room and on EPA tv. Sign Language Interpreters will be present at the event. People needing reasonable accommodations should contact Kristin P. Tropp at 202-559-0006 or [tropp.kristin@epa.gov](mailto:tropp.kristin@epa.gov). A recording of this event will be available November 8th via EPA tv-on-demand site. Please remember that EPA tv is available at: <http://epatv.epa.gov> using only Internet Explorer while on the EPA network and cannot be accessed remotely. If you have any questions, please contact J. Adam Link at: [Link.John@epa.gov](mailto:Link.John@epa.gov) or (202) 564-6463.

## **Excused Absence for Voting**

Some state elections are taking place today. Employees may be granted an excused absence (i.e., administrative leave) to vote depending on their work schedule and the polling times for their voting jurisdiction. If the difference between an employee's scheduled arrival and departure times and the poll's opening and closing time is less than three hours, an employee is entitled to administrative leave, up to a maximum of three hours. If an employee's voting place is beyond normal commuting distance and voting by absentee ballot is not permitted, the agency may grant excused absence (not to exceed one day) to allow the employee to make the trip to the voting place to cast a ballot. If more than one day is needed, the employee may request annual leave or leave without pay for the additional period of absence. Refer to EPA's policies regarding official time off for voting and the use of administrative leave. Some of the agency's collective bargaining agreements with its unions contain similar language. Any employee needing an excused absence to vote should seek approval from their first-line supervisor. If you have questions regarding these guidelines, please contact the Policy and Accountability Branch, Office of Human Resources, at [OHR\\_PPTD\\_PAB@epa.gov](mailto:OHR_PPTD_PAB@epa.gov).

## **Early Time and Attendance Entry for Pay Period Ending November 10**

The upcoming Veterans Day holiday requires early time and attendance submission and approval for early payroll close-out deadlines. Employees will receive pay only after they and their supervisors approve their timecards in PeoplePlus. For the pay period ending November 10, all time cards must be submitted and approved in PeoplePlus no later than 10 p.m. (ET) on Thursday. Employees should not modify their timecard after this. For all corrected timecards for previous pay periods, all submissions and approvals must occur by 10 p.m. (ET) today. If you have questions regarding this schedule, please contact 202-564-6236 or [HRPAYHELP@epa.gov](mailto:HRPAYHELP@epa.gov).

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## **Accolades:**

### **EPA's AGWA Tool in Federal Lab Consortium (FLC) 2019 Calendar**

The 2019 FLC calendar will feature EPA's Automated Geospatial Watershed Assessment (AGWA) Tool, submitted to the FLC by NERL. The tool was developed under a cooperative research and development agreement (CRADA). The parties to the CRADA were USDA, ORD (William Kepner), and the University of Arizona. This technology received the 2018 FLC Interagency Partnership Award for the multi-agency and university joint collaboration. A photo spread will be featured for November 2019.

### **Scientist Recognized by ASTM International**

NRMRL's Xiaoyu Liu received an award from ASTM International, the American Society for Testing and Materials. The award is in recognition of her dedication and leadership as chair of the Indoor Air Subcommittee D22.05. In this role, Xiaoyu oversees standards development activities, organizes biannual meetings, and handles general administrative duties of the subcommittee, which includes over 200 international members from academia, industry, and government, as well as consumers. Congratulations!

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## **In the Community:**



## **EPA-RTP STEM Outreach Program**

- Tomorrow, the program will lead its 6th EPA Environmental Club for 3rd-5th graders at E.K. Powe Elementary School in Durham, and participate in Citizen Schools at Githens Middle Schools in Durham.
- On Thursday, the program will host approximately 15 students from Hillside High School in Durham for an all-day EPA field trip to kick off the 2nd year of EPA's Mentorship Program; participate in a Career Fair at Northern High School in Durham; lead its 6th biweekly hands-on STEM activity for the afterschool program at Holt Elementary School in Durham; attend the Duke University Energy Initiative Energy Conference Net Zero Program; and participate as career role models in an afterschool program for African American males at Powell Elementary School in Raleigh, N.C.
- On Friday, the program will participate in the STEM in the Park TechFest in RTP. TechFest is designed to foster interactions between underserved students in grades 7-12 and STEM professionals. EPA will have a booth demonstrating particle sensors with a hands-on activity, as well as scientists who work in particle sensing field to talk with students about their education and career. EPA will also participate in Speed Mentoring to talk with students about STEM careers

## **Massachusetts STEM Week**

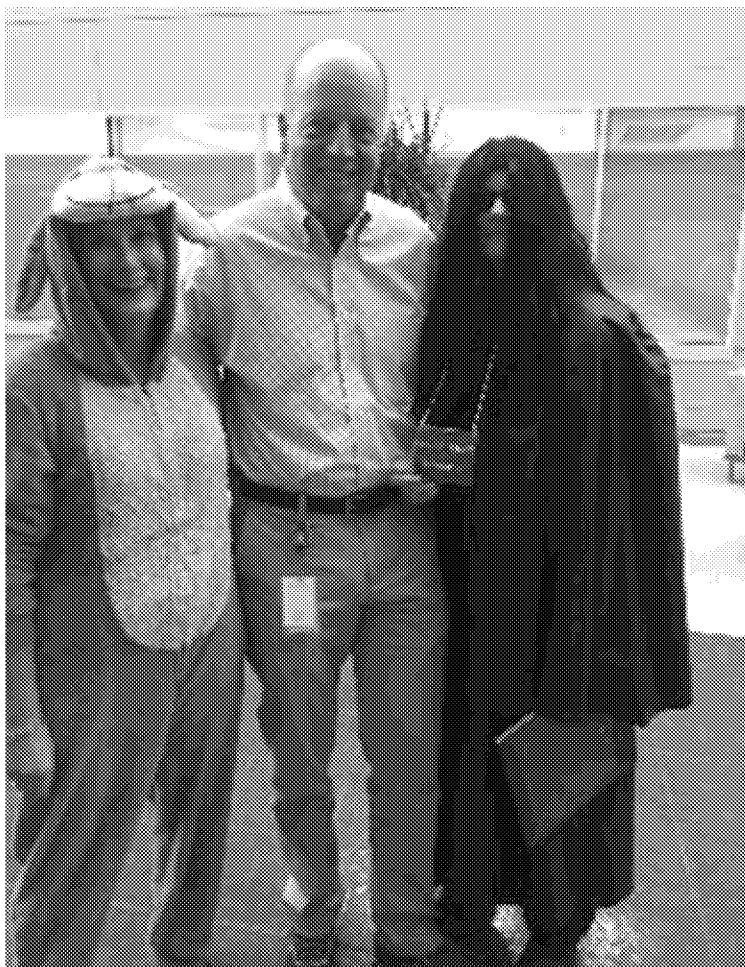
Last month, NERL's Kelly Witter helped 6<sup>th</sup> graders from Parlin School in Everett, MA celebrate Massachusetts STEM Week. The school hosted Region 1 EPA scientists and played the GENERATE board game. The game was developed by EPA to teach students how cities and towns make energy decisions. Student teams competed with one another to fill their power grid at the lowest cost.

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## **Photos of the Week: ORDers in Costume**

Last week, ORD in HQ held a fall harvest celebration on Halloween and quite a few ORDers dressed up for the occasion. Meanwhile, down in RTP, NHEERL held a Boo Bash Halloween Costume Contest & Breakfast. See a few photos from the festivities below!





*L to R: NHEERL's Janice Brown as Eeyore, Chris Robbins, and Kay Holt as Kay-Anu Reeves*



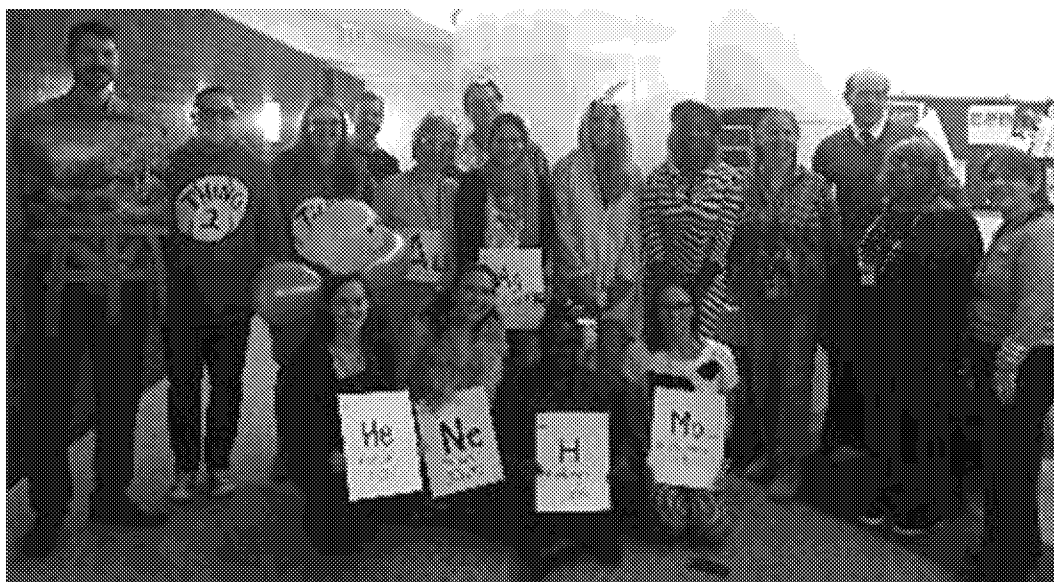
*Some of the IOAA front office support staff in HQ dressed up as the elements of the periodic table*



*Some spooky decor for the ORD Harvest Fest Celebration in DC*



*Jennifer gave some welcoming remarks to staff to kick off Harvest Fest in DC*



*Group photo of ORDers in DC in costume*